sel Peart points out, physicians, because of their confidential relations with patients, are frequently consulted by the latter with reference to the making of their wills; and it is often necessary for a physician to suggest that a patient get his earthly affairs in order. For these reasons, as well as for the personal information of members of the Association, it is hoped that the advice given by Mr. Peart will be found of value. The article referred to appears in this issue, page 20.

General Counsel Peart was for many years the inheritance tax attorney for the treasurer of the city and county of San Francisco, and thereafter special counsel for the state controller in a number of leading cases involving inheritance tax due to the state of California; including the estate of the late cattle baron, Henry Miller, in which an inheritance tax of over two million dollars was paid, after years of legal proceedings spent in determining and fixing the tax. The administration of the Inheritance Tax Act of California is directed to the fixing and assessing of such tax on the interests and property which pass from a decedent by reason of his death.

Singularly enough, the case of John Brown, mentioned in the article above referred to, pertains to a member of a doctor's family; and an inquiry sent by the editor to the general counsel concerning some features of that estate, resulted in a suggestion that the article be written.

### DECREASED BUDGET OF STATE BOARD OF HEALTH

Dismissal on July 1 of some of the technically trained personnel of the California Department of Public Health, with the probability that some of the smaller full-time county health units will have to be abandoned, was recently announced by Dr. John H. Graves, president of the State Board of Public Health.

This action, Dr. Graves said, has become necessary as the result of a 20 per cent reduction made by the legislature to a budget which the department had previously reduced by 25 per cent.

Notices of their separation from the service have been given to a number of the department's employees; in the classifications that include pediatrician, public health nurse, sanitary engineer, bacteriologist, rodent hunters (bubonic plague) and stenographers.

On a coöperative basis, the state and federal public health departments have contributed toward maintenance of some of the California full-time health units. These funds have been matched by the Rockefeller Foundation. This financial support by state and federal governments is being withdrawn, which means there will be no further contributions from the Rockefeller Foundation. Unless the counties can raise their own funds—and they report this will not be possible—full-time health units which have been receiving this aid necessarily will be obliged to revert to their former status, with part-time health officers.

"The entire budget of the State Department of Public Health," Doctor Graves said, "was slaughtered by the so-called economy bloc in the legislature. The total appropriation allowed by the legislature is so small—representing a 45 per cent reduction over the present biennium—that some of our bureaus have been seriously crippled.

"Child Hygiene, in which field much of our program of prevention lies, has little left—a bureau chief, a stenographer, a part-time public health nurse.

"The field worker in the Bureau of Tuberculosis has been removed. Previously, our motor clinic and its personnel had to be discontinued. This entire bureau now consists of two persons—the chief and a clerk.

"All of the work that lies ahead of us, not only for the prevention of tuberculosis, particularly in children, but for the prevention and control of other communicable diseases, and for public health work in general, is in jeopardy. Public health in California, I am afraid, will run to a low ebb unless the legislature, in the July session, restores some of our funds."

* * *

Attention is called to the above, so that the physicians of California may better understand the new regulations which, under these conditions, must come into operation.

The State Board of Health suggested to the legislature that if the state tuberculosis subsidy to counties ($3 per week per patient in county sanatoria measuring up to proper state standards) was reduced to a $2 basis, the saving to the state treasury would have amounted to something like $162,000 per year; and that if the sum so saved could have been allocated to the State Board of Health, none of the essential bureaus or activities of the State Board of Health would have been jeopardized.

It is unfortunate that the budget revision committees of the legislature failed to visualize the importance of the public health work of California; and that in the effort to create a balanced budget, the blue pencil method of reduction should have been followed. It is hoped that in the postponed July session of the legislature, this budget will be reconsidered. Physicians who are interested in these public health activities should contact their local legislators during the recess, which ends on July 17, in the hope of securing a reconsideration of these matters when the legislature again convenes.

## EDITORIAL COMMENT*

### MEDIASTINAL PLEURISY

Mediastinal pleurisy is an inflammation of the pleura covering the mesial side of the lung and the lateral surface of the mediastinum. Not until there is encysted fluid between these surfaces are

* This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comment by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California and Nevada Medical Associations to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

there definite clinical and roentgen-ray signs of the type of pleurisy we are dealing with. While it is not a frequent lesion, it is probably more often overlooked or incorrectly diagnosed than any other pleural condition. Mediastinal pleurisy was diagnosed by Laennec, Andral, and others long before the discovery of the roentgen ray. The roentgen examination remains, however, the best diagnostic procedure. An excellent résumé of the early history and review of the first reported cases of mediastinal pleurisy is that of Anders Frick.[1]

The dry and serofibrinous types of mediastinal pleurisy as a rule are tuberculous in origin and often heal spontaneously without any serious results. Rupture into a bronchus or other important organ of the chest usually results fatally unless the invading organism is the pneumococcus. This latter type of infection gives a vomica thin in consistence and does not have a foul odor. Rupture usually takes place within twenty days after onset of the infection; therefore early diagnosis is important.

Because the pleural effusion is adjacent to the important mediastinal organs, the clinical signs differ radically. A good description of the clinical syndrome is given by Dieulafoy. He states: "Mediastinal pleurisy starts as an acute febrile attack with pain, fever, cough, and dyspnea. The symptoms caused by pressure on the mediastinum are dyspnea, stridor, sucking in of chest wall, dysphagia, distention of the veins of the chest, fits of coughing and suffocation, hoarseness, dysphonia, and spasm of the glottis. All, or only some, of the symptoms may be present, due to whether the pressure is on the trachea, esophagus, azygos vein, the pneumogastric or recurrent laryngeal nerve." The clinical sign of dullness, usually posterior, appears about the tenth day. When there are changes in the voice a bronchoscopic examination is also advisable.

The classification of types of mediastinal pleurisy is usually that based on the location of the effusion in relation to the pulmonary ligament, such as anterior and posterior, right and left. The posterior type appears to be the most common. The left, anterior type, is more frequently fatal than the other types.

The roentgen technique consists of a careful fluoroscopic examination of the chest in all positions, and of films made in those positions best suited to show the pathology in each particular case. Overexposed films are often useful in left-sided effusions. The injection of iodized oil or air, inflation of the stomach and the visualization of the esophagus by barium mixture are valuable diagnostic measures.

Treatment consists of locating encysted fluid by puncture, repeated if necessary, and careful surgical drainage so that the general pleural cavity is not infected.

In any obscure chest condition of sudden onset, with pain and nonproductive cough and with little or no increase in temperature, pulse rate, or leukocyte count, the possibility of mediastinal pleurisy should be kept in mind. No doubt many cases of mediastinal pleurisy have been overlooked in the past.

1501 South Figueroa Street.

HENRY SNURE,
Los Angeles.

1 Frick, A.: The Different Forms of Mediastinal Pleurisy with Report of Three Cases, Jour. Am. Med. Assn., 55:2042-2048, 1910.

## HISTOLOGICAL SPECIFICITY

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The human body is an organized colony of widely different immunochemical characteristics. Each tissue is an unique mixture of numerous ancestral, mammalian, amphibian and subamphibian proteins, lipoids and carbohydrates, thinly veneered with human-anthrapoid serum specificities. Following conjugation of the ovum and the spermatozoan there is a phylogenetic recapitulation of ancestral evolutionary biochemical history, which recapitulation is not fully complete during intrauterine life.

While the above statements grossly overemphasize the few imperfectly known facts of human tissue specificity, they do outline the generally accepted working hypothesis in current bacteriological and immunological research.

The earlier immunologists, of course, did conceive the possibility of immunochemical differences between the blood and fixed tissues of the same individual. They, however, were unable to demonstrate their postulated humoral-cellular specificity differentials. They concluded that, for all practical purposes, such differences, if they do exist, are negligible factors in specific immunity. Current methods of specific diagnosis and specific therapy, therefore, consistently ignore all reference to possible organ-specific immunochemical factors.

Data contrary to the conventional unitarian concept of tissue specificity began to accumulate as soon as the newer fractionation techniques were applied to animal tissues. The isolated proteins of the crystalline lens were soon found to be widely different from the serum proteins. All thyroglobulins were found to be of approximately the same specificity in different mammalian species. The lipoid-free kidney proteins were demonstrated to be organ-specific and not species-specific. Protein fractions that can be figuratively described as species-specific, genus-specific, and phylum-specific were demonstrated in the blood stream.

Equally convincing data were obtained from studies of the alcohol-extractable tissue lipoids. The brain-lipoids, for example, are now recognized as being immunochemically identical in such widely different species as man, sheep, rat, and frog.[1] The kidney lipoids are also apparently

† Part I of this series was printed in the February CALIFORNIA AND WESTERN MEDICINE, page 116; Part II in March, page 188; Part III in April, page 275; Part IV in May, page 380; Part V in June, page 447.

1 Lewis, J. H.: Jour. Immunol., 24:193 (March), 1933.